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10/034,446

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Rick K. Southern

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EXAMINER

A, PHI DIEU TRAN

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/034,446

Applicant(s)

RICK K. SOUTHERN

Examiner

Phi D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,10,12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10,12 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 10, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), Murray, and Searer (5570554).

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete floor surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12) and securing the floorboards to the concrete with an adhesive (8), the step of allowing the adhesive to set, the step of providing the floorboards with surface wormholes (6, it is unclear from the claims what applicant's wormholes look like and the structure at 6 reasonably interpreted as meeting the limitation of wormhole) or colors (inherently so), the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features (6 and 2, and the protrusion 1 above the wormhole 6) that include at least one of wormholes (6) and scratches, and the floorboards are nailed by nailing nails into the surface features to hide the nails therein, the floorboards are installed so that the

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surface features (visible when the edge panels are not yet installed, and the step does not require that the installation is complete) are visible, the adhesive is applied to provide an adhesive layer.

Greenway does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface substantially at right angles thereto through the boards.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3 lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because applying nails to a floorboard bonded to the concrete floor by an adhesive, would

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enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and a diisocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for "SUBFLOOR REQUIREMENTS").

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

3. Claims 1-2, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), and Murray.

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12) and securing the floorboards to the concrete with an adhesive (8), the step of allowing the adhesive to set, the step of providing the floorboards with surface wormholes (6) and colors, the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features that include at least one of wormholes (6) and scratches, the floorboards are nailed by nailing nails into the surface features to hide the nails therein, the

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floorboards are installed so that the surface features (visible when the edge panels are not yet installed, and the step does not require that the installation is complete) are visible, the adhesive is applied to provide an adhesive layer.

Greenway (figure 1) does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3 lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

Greenway (figure 2) shows nailing the boards to the concrete floor surface substantially at right angles thereto through the boards.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by

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Greenway (figure 2) because applying nails to a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would enhance the securing of the floorboards to the concrete as taught by Greenway (figure 2).

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and a diisocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for “SUBFLOOR REQUIREMENTS”).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway’s modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

4. Claims 5-7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong, Murray, and Searer (5570554).

Greenway shows hardwood floor planks (page 2, col 2 lines 24-30, figure 1) of at least about 3 feet (page 1 col 1 lines 26-29) being attached onto a concrete surface and securing it with an adhesive, the floor having varying thickness at the grooves, the floorboard being provided with color and wormholes (6), nails (14) can be used in the wormholes (6), the floorboards are of varying thickness (at the grooves).

Greenway does not show the adhesive being water resistant, water impermeable adhesive, nails that extend at right angles to the concrete floor surface through the boards, through the adhesive and into the concrete floor surface.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the floorboard in place, the nails going through the board and the adhesive into the concrete floor surface.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface at right angles thereto through the boards.

Murray discloses a water resistant, water impermeable adhesive (10) securing a flooring surface to a concrete surface.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's structure to show nails going through floorboards and adhesive and into the concrete floor as taught by Armstrong, the adhesive being water resistant, water impermeable as taught by Murray, nails attaching the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because having nails attaching a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

Response to Arguments

1. Applicant's arguments filed 8/2/07 have been fully considered but they are not persuasive.

With respect to applicant's argument that the combination does not show the method for attaching solid hardwood floor planks to concrete floor surface and the plank wood boards having a length of at least 3 feet, examiner respectfully disagrees. The combination of the references, as set forth clearly shows applicant's claimed method steps. Greenway also shows the board being at least 3 feet as claimed as set forth above.

With respect to the Supplemental Declaration to Richard Hirsch, it is found not persuasive as the rejection of the claims based upon Greenway, Armstrong, Murray and/or Searer teaches applicant's claimed limitations. To further respond to applicant's Declarations, examiner would like to point out that the combination enhances the attachment of Greenway's boards to its substructure. The modification is thus encouraged and motivated. Other arguments in the Declaration are also not persuasive as explained above.

2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to applicant's statement of Greenway not showing nailing the boards to the surface substantially at right angles thereto, examiner respectfully points out that Greenway shows the angle of the nails at **substantially** right angle. The claimed limitations do not require that angle being at ninety degrees.

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With respect to “wormholes”, the reference shows the limitations as claimed. If applicant means “wormholes” to represent a specific structures different from the groove, applicant is respectfully asked to put the limitation in the claim.

With respect to Armstrong, the reference is relied upon to modify the primary reference to Greenway. Greenway as modified by Armstrong, further shows the structure being bonded by an adhesive, and thus would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong. The combination shows the limitations as claimed.

3. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is found in the references themselves. Greenway's

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teaching is enhanced and improved by the combination of the references as set forth above in the rejection. The argument is thus moot.

With respect to the Declaration to James Perkins, the Declaration has been considered and found to be non-persuasive. Examiner has found it obvious to combine the references to arrive at an improved teaching for Greenway. The combined teaching also shows all the claimed limitations.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A *PA*

10/15/07



RICHARD E. CHILCOT, JR.
SUPERVISORY PATENT EXAMINER